## K 1399 Condition Report

Conservation Started: 02/03/2011
Conservation Finished: 02/03/2011
Conservator: MCG
Time Taken: 3 hours
Including digital photography, report, conservation and packing.

Dimensions: Foil A: (L) 5mm; (W) 2.5 mm
Foil B: (L) 3 mm ; (W) 2 mm
Foil C: (L) $4.5 \mathrm{~mm}(\mathrm{~W}) 2 \mathrm{~mm}$
Catalogue number: 695

## Digital photography:

Taken with a Nikon Coolpix 4500 digital camera, under daylight or bulbs and Meiji Techno RZ Stereo microscope with an Infinity 1 camera (with analyses capture software) and fibre optic lights, 7-75x magnification. Taken before, during and after

## Annotation on any of the storage bags or boxes:

Description: Visual and microscopic examination using Meiji stereo microscope 7-75xmag

Three separate complete backing foils from garnet fittings.
All three foils have uniform cross hatching of the standard type.

Foil A

This is a trapezoid shaped foil containing 4 or 5 sides (one corner edge is damaged with a resulting loss of a small part of the foil). It is roughly 5 by 2 mm in size. The edges of the front are folded upwards clearly indicating were the cell edges would have been. The cross hatching is at a spacing of around 0.16 mm and consists of around 5 lines per mm and is square in form.

This foil had an organic sample loosely adhered to the soil layer on the back side. This on examination was thought to be a root hair and was removed and retained in a sample tube.

An area roughly central on the under side has either an area of tarnish or the residue of the fixing paste.

## Foil B

This is a rectangular shaped foil. Its dimensions are roughly $3 \times 2 \mathrm{~mm}$. It is complete with no edge loss, except that one corner is folded back onto itself, and the opposite edge has some distortion along its
length. This has a very similar spacing as Foil A with around 5 lines per mm and being square in form. Again the front edges are bent upwards so that we can see the rough size of the cell it fitted.

Foil C

This is a roughly rectangular foil although it is multisided. There is some damage and loss of foil at one corner which again as foil A means that it is not possible to tell if this corner was made from one angled edge or two right angled edges. Again it is around $2-3 \mathrm{~mm}$ in size. There are 5 edges were the foil is bent upwards showing the edges of the cell it fitted into. Originally it would have had 6 or 7 edges. The cross hatching is different from Foil $A$ and $B$ in that the hatching is rectangular not square in form. The spacing on this is of the order of 4 lines per mm in one direction and 5 lines per mm in the other.

All of these foils show a line spacing of around 5 lines per mm. This is a very high number when compared to the Sutton Hoo pieces, were it averaged out at around 4 lines per mm. It has been suggested that the greater the fineness of the line spacing the earlier the workmanship.

## Associated objects:

Condition: Visual and microscopic examination using Meiji stereo microscope 7-75xmag

All three are in good condition. Foil $A$ and $C$ have damage and loss of the surface around one of the edges, whilst foil B has some surface distortion along one edge.

Treatment: Carried out using a Meiji stereo microscope
Purpose: Display/Study
Aim: Total cleaning
Materials: Soft natural/synthetic brushes, cotton swab, cocktail stick, thorn in pin vice/holder, water/IMS on metals

The granular soil on the exterior/interior surface was mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. IMS or water was used to soften the soil to facilitate removal.

Loose particles of soil were then removed with a small swab of IMS.

## Samples:

1. Probable root hair from Foil A

References: A study of the Cross Hatched Gold foils from Sutton Hoo by Katherine East in Anglo-Saxon Studies in Archaeology and History number 41985.

